WSDOT

State Smart Transportation Initiative

Get more info

www.wsdot.wa.gov/choices/demand

60,000+

Number of bicyclists and pedestrians counted in nearly 40 communities across the state during a.m./p.m. commute over three days in September 2012.

200

Number of people carried in

- 177 cars
- 3 buses
- 1 light rail train

46%

Share of person trips through the I-5/SR 99 corridor taken by transit, vanpools and carpools. Transit accounts for about 20% of person trips.

42-51 mph

Estimated vehicle speed necessary for maximum throughput.

20%

Share of person trips served by transit through the SR 520 corridor.

30

Vehicle miles of travel reduced for each day one person teleworks.

2,000+

Number of vanpools driving more than 18,000 people to work each weekday in the Puget Sound region – the nation's largest vanpool program.

34%

Share of people an average HOV lane carries on a five-lane freeway in morning rush hour. Adding an HOV lane moves more people with less traffic.

60%

Increase since 2007 in use of variable message signs to manage demand with real-time traffic information.

Path to the top

From rural areas to big cities, managing demand helps WSDOT get the most from investments. It's an upward path to healthy communities, sustainable mobility and a strong economy.

DEMAND MANAGEMENT THE PATH TOWARD GREATER EFFICIENCY

DEMAND MANAGEMENT
THE PATH TOWARD GREATER EFFICIENCY

Transportation demand management is a strategy for system efficiency. It employs economical tools and techniques that help projects to perform at their highest potential. The strategy is rooted in collaboration and uses approaches such as ridematching, parking pricing, transit enhancements and public awareness.

Three essential strategies for WSDOT's mission to keep Washington moving are operating efficiently, strategically adding capacity and managing demand. Demand management spurs collaboration to reduce project costs and improves system performance with projects designed to serve communities as well as corridors.

How does it work?

Demand management helps projects meet their highest potential for performance. The strategy employs tools that encourage people to choose the best time, mode or route to travel. They ease the demand for new capacity, maximize efficient traffic flow and extend project lifespan.
Here are some examples:

Education, promotion and outreach: Promote efficient travel choices by raising awareness of existing options and providing information that encourages people to drive less or shift their travel to less congested times or routes.

Collaboration: Engage employers and communities to reduce drive-alone trips by providing workers information about travel options, offering free ridematching services, providing facilities for bicycle and pedestrian commuters, encouraging telework and flexible work scheduling and rewarding workers for making efficient transportation choices.

Coordinated land use and transportation: Improve connectivity between roads and bike/pedestrian paths. Support high-density, mixed-use development near transit.

User fees: Use tolling or parking fees to place value on lane space, encourage efficient travel choices and shift demand to alternate modes, routes and times.

Am I expected to consider demand management strategies for my projects?

Yes. Whether the project objective is safety, mobility or preservation, an executive order directs WSDOT planners and project engineers to consider strategies that optimize system performance and efficiency and reduce the need for additional capacity.

How might I consider applying this strategy to a project?

Here's an example: Let's say your project team's analysis indicates that reducing peak-hour traffic by 200 vehicles in the project corridor could significantly ease traffic over the next decade. This information fuels collaboration among your team and affected jurisdictions, communities, stakeholders and other partners. This study team identifies four major employers in the project area without an effective commute trip reduction program. The team launches a program of education and incentives for workers at those worksites to reduce drive-alone trips. It reduces peak-period demand and increases person throughput, meeting the targets.

Does demand management really make a difference in system performance?

Yes, but results vary. In urban areas opportunities are many – transit service and transit passes, carpools, bike lanes and sidewalks, parking fees and tolls – and their effect on traffic flow and person throughput is substantial.

For example, in Seattle's I-5/SR-99 corridor almost half of all commuters use transit, carpool or vanpool during peak period. If they drove alone, this congested corridor would be in gridlock. In rural areas, options such as vanpooling and compressed work schedules have proven effective at reducing drive-alone trips and improving system performance.

The Lloyd District, in Portland, Ore., set ambitious goals for new housing and jobs, recognizing that meeting these goals would require easing traffic congestion and improving travel options. With a bundle of new strategies, including reduced public parking, increased parking fees, improved transit service and better pedestrian and bicycle access, the district met its housing and economic goals while significantly reducing vehicle miles traveled. In just a few years, transit trips jumped from 10 percent to 30 percent, bicycle commute trips increased five-fold and annual vehicle miles traveled shrank by 4 million.

What factors are most important to demand management success?

- Strong collaboration with local partners
- Clear understanding of affected travel markets
- Thorough analysis of existing and potential opportunities

Who pays for demand management in WSDOT projects?

- Local employers offer incentives for workers to reduce drive-alone work commutes.
- Transit agencies fund services through local sales tax revenue and fares.
- A statewide multimodal budget pays for the state Commute Trip Reduction program.
- State and federal grants help fund local and regional programs.
- Some demand management strategies, such as tolling or priced parking, also generate revenue.

What does WSDOT already do to manage demand?

Among other activities, WSDOT leads the statewide Commute Trip Reduction program, uses HOV lanes and electronic tolling in congested corridors, provides real-time traffic information, manages construction traffic impacts, builds new pedestrian and bicycle facilities, administers grants and manages a free, tri-state ridematching service called RideshareOnline.com

Public Transportation Division Contacts

Keith Cotton
CottonK@wsdot.wa.gov

Stan Suchan
SuchanS@wsdot.wa.gov

www.wsdot.wa.gov/choices/demand

Washington State Department of Transportation

State Smart Transportation Initiative
www.ssti.us